PEAK LOAD MANAGEMENT ALLIANCE 2002 SPRING CONFERENCE

"AT THE FERC, A STRONG COMMITMENT TO DEMAND RESPONSE"

REMARKS BY
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Good morning. When I was sworn in as a Commissioner at the FERC in May, 1993, almost nine years ago, the agency was in the process of aggressively implementing Order No. 636, a rule requiring about 100 interstate natural gas pipelines to unbundle supply from transportation so that well head competition could flourish. In 1996, the Commission chose a similar course for wholesale electricity policy, issuing Order No. 888, opening the transmission grid of 167 transmission providers to allow supplier competition to flourish.

We have clearly crossed the sharp divide between old fashioned cost of service regulation, on the one hand, and an approach relying primarily upon markets to discipline wholesale electricity prices. Once we crossed this great divide, however, once policy makers chose a market-based approach, we had the obligation to ensure that markets benefit consumers. A market based approach must provide consumer benefits. Otherwise, there is no point to it, and we may as well try something else.

Since issuing Order No. 888 six years ago, the FERC has been focusing feverishly on making the markets work for customers. That's what Order No. 2000 is about – reorganizing the transmission grid to provide a solid, reliable pro-market trading platform known as the regional transmission organization or RTO.

What we've learned is that for electricity, market structure is critical. Regulators can't simply open the markets, adopt any old market design, ignore market structure, and declare "let 'er rip". We can't be satisfied with chaotic markets, poorly designed markets, markets that facilitate the exercise of market power, and markets that don't provide customer benefits. The Federal courts have told us that in meeting our statutory

obligation to ensure just and reasonable wholesale prices, we can of course rely on cost of service regulation; that will produce a lawful just and reasonable price. If, however, we move to an approach that relies upon markets to discipline prices, we must ensure that the market is functioning well. Otherwise, the price disciplining effect is insufficient to ensure just and reasonable prices, the prices are unlawful, and we have failed to carry out our statutory obligation.

So, we are required to ask a somewhat basic question that has a complex answer – what are the elements necessary for a well functioning market? We know we need adequate and unconcentrated supply offered by a number of suppliers, sufficient transmission resources, a balance of long and short term contracts, good price signals, a rational approach to congestion management and the like. But what if half of the market – the demand side – is simply not involved. Can you have a well functioning wholesale electricity market if half of the market is not playing? As it turns out, we now know it is extraordinarily difficult to have a good market for any commodity if demand resources are not participating.

When prices spiked in California during the summer of 2000, FERC was desperate for solutions. I had seen a supply curve graph prepared by Eric Hirst showing that when the supply curve is steep during peak hours, a fairly modest demand response can have a substantial and dramatic price dampening effect. I began to ask internally – what is FERC doing to facilitate this seemingly magic demand response? I was told that FERC does not do the demand side, that it was a state issue, and that we should stay focused on supply issues.

There was something about this answer that made no sense to me. Obviously, resolving demand issues necessarily implicates state policy, but here is the fundamental problem for FERC: We are responsible for ensuring just and reasonable wholesale prices, and yet it may be impossible to carry out that responsibility without the price disciplining effect of demand resources participating in the wholesale market. So, FERC must be involved with these issues. So I began to insist that FERC orders highlight this issue, but for several months I was the Lone Ranger. As I got more traction with my colleagues, as Chairman Wood and Commissioner Brownell joined the Commission, we have used our bully pulpit to promote a robust demand response in electricity markets. Our orders are now replete with references to the importance of the demand side, and express our resolve to facilitate robust demand responsiveness. It has been an uphill battle within the Commission, however, because a mere two years ago the accepted wisdom at FERC was that we should stay out of demand side issues.

Obviously, demand programs have been around for years and have been valuable reliability and environmental resources. What's different now is the new found respect for demand resources as highly valuable in a market environment.

Why is demand responsiveness so important? First, demand responsiveness can be an important market resource for ensuring adequacy and reliability. In the planning arena – demand responsiveness can be a critical factor in determining generation and transmission adequacy. This was true in the old cost of service world, and it's true in the market era as well.

Second, with respect to short term grid operations, demand responsiveness can be a key factor in congestion management. We all know that congestion can be relieved in three ways – transmission, generation or a demand response that creates capacity on the wires.

And third, demand responsiveness is an important tool for mitigating market power. Robust demand responsiveness can help reduce the need for regulatory intervention in markets. This is critical. In some of our markets, price caps have been viewed by some as a substitute for demand responsiveness.

So if the FERC now understands the importance of demand response to achieving our goal of well functioning wholesale markets, where are we in terms of policy development?

Let me put this in context. There are three major policy evolutions underway at the Commission at this time.

First, standardized interconnection procedures and agreements. Yesterday, we proposed a rulemaking standardizing the interconnection process and proposing a standard offer interconnection agreement.

Second, the evolution of RTO policy is proceeding apace at the Commission. Order No. 2000 was issued two and half years ago. It had three goals: reorganize grid operations around large regional trading hubs called RTOs, eliminate multiple transmission charges, and restructure grid operations under the control of independent entities that do not own merchant interests. The implementation of our RTO policy has been mixed, primarily because it is a voluntary program. Nevertheless, I am convinced that the Commission will insist that an RTO form and operate in every region of the country. When that happens, grid operations will support large regional markets and the RTO will eliminate the incentive for grid operations to favor one merchant interest over

another. The RTO principle of resource neutrality will obviously benefit demand resources, as will more efficient grid operations and large regional trading hubs.

Some states are skeptical about the costs and benefits of RTOs. The Commission is now in the midst of an intensive outreach program with the states in an attempt to resolve their concerns. As we meet with state commissions, the Commission intends to push forward.

The third major are of policy evolution is our effort to promote standard market design for wholesale markets across the nation. We have observed what doesn't work, and we now have several years of excellent experience with the PJM and NY ISO market design based upon the concept of bid based, security constrained dispatch for real time operations with locational marginal prices. FERC has become increasing concerned that without a national policy, what will evolve is somewhat quirky, idiosyncratic market designs that may be inefficient and inhibit broad trading among regions. The Commission is working toward a standard market design that all jurisdictional transmission providers and power sellers will implement.

On March 13, the Commission published its working paper on standardized transmission and wholesale market design. The working paper leads off with a set of principles to guide the development of a standard market design. We made sure that these principles reflect our commitment to a market design that paves the way for the demand side of the market to participate vigorously. Those principles are as follows:

1. The objective of standard market design for wholesale electric markets is to establish a common market framework that promotes economic efficiency and lowers delivered energy cost, maintains power system reliability, mitigates significant market power and increases the choices offered to wholesale market participants. All customers should benefit from an efficient competitive wholesale energy market, whether or not they are in states that have elected to adopt retail access.

2. Standardization of market design and business practices reduces transaction costs and reduce "seams issues" that restrict trading. In developing and implementing standard market design, the maximum benefit will be gained by standardizing as much as practicable. Deviations or changes from the standard must be consistent with or superior to standard market design. Such changes must also be compatible with neighboring systems to prevent seams issues.

3. Market rules and market operation must be fair, well defined and understandable to all market participants.

4. Imbalance markets and transmission systems must be operated by entities that are independent of the market participants they serve.

5. Energy and transmission markets must accommodate and expand customer choices. Buyers and sellers should have options which include self-supply, long-term and short-term energy and transmission acquisitions, financial hedging opportunities, and supply or demand options.

6. Market rules must be technology-and fuel-neutral. They must not unduly bias the choice between demand and supply nor provide competitive advantages or disadvantages to a large or small demand or supply sources. Demand resources and intermittent supply resources should be able to participate fully in energy, ancillary services and capacity markets.

7. Standard market design should create price signals that reflect the time and locational value of electricity. The price signal – here, created by LMP – should encourage short-term efficiency in the provision of wholesale energy and long-term efficiency by locating generation, demand response and/or transmission at the proper locations and times. But while price signals should support efficient decisions about consumption and new investment, they are not full substitutes for a transmission planning and expansion process that identifies and causes the construction of needed transmission and generation facilities or demand response.

8. Demand response is essential in competitive markets to assure the efficient interaction of supply and demand, as a check on supplier and locational market power, and as an opportunity for choice by wholesale and end-use customers.

9. Transmission owners will continue to have the opportunity to recover the embedded and new costs of their transmission systems. Consistent with current policy, merchant transmission capacity would be built without regulatory assurance of cost recovery.

10. Customers under existing contracts (real or implicit) should continue to receive the same level and quality of service under standard market design.

However, transmission capacity not currently used and paid for by these customers must be made available to others.

11. Standard market design must not be static. It must not inhibit adaptation of the market design to regional requirements nor hinder innovation.

Based upon these principles, principles that explicitly and repeatedly (e.g., nos. 5, 6, 7 and 8) recognize the role of demand resources in well designed wholesale markets, the Commission then proposed a standard market design. Let me underscore five key features this morning.

First, all load would take transmission service under a single tariff. This will apply for wholesale transmission service and for both unbundled and bundled transmission services at retail. Power is not consumed at wholesale. Thus, all transmission uses, whether wholesale or retail, must be treated equally and without preference.

Second, the Commission will define a new open access tariff that will update the old Order No. 888 tariff. The tariff will be based upon a new network transmission service available to all transmission service customers. Here are the features of this new service:

- New network service available to all customers
- Access to all sources and sinks
  - Price certainty with transmission rights
  - Congestion charges without transmission rights
- Locational marginal pricing (LMP) for congestion management
- Transmission service scheduling integrated with energy markets
- Network access charge to recover embedded costs

Third, the market design specifies certain energy markets that must be offered:

- Bilateral and self-schedules
- Day-ahead market

- Voluntary, bid-based, security-constrained
- Financially binding

■ Real time market

- Bid-based, security constrained
- Used to settle all imbalances

■ All supply and demand resources will participate on an equal footing

Fourth, the standard design market must include operating reserves:

■ Markets for operating reserves

- Bilateral arrangements and self-schedules
- Bid-based day-ahead and real time markets

■ Operated together with energy and transmission market

And fifth, the market design promotes a strong monitoring and mitigation function:

■ Market rules should enhance competition

■ Preventative mitigation measures built into market rules

■ Role of the Market Monitoring Unit

- Independent of RTO management
- Focus on withholding and market efficiency

The plan is to issue a proposed rule implementing standard design by June, and to finalize the rule by December.

Key features of this standard market design will facilitate demand side participation:

– Technology/fuel neutrality – demand resources will participate fully in energy, ancillary services and capacity markets

- Day ahead market – gives all resources and loads time to adjust their supply and consumption decisions

- LMP price signal – shows true cost of congestion so demand resources can be appropriately valued

- Planning model – must explicitly consider demand resources as well as generation and transmission

- Market power mitigation – demand resources will be an important check on supplier and locational market power

Obviously, state and Federal policies need to be coordinated for all of this to occur. FERC can't make this happen alone. Demand response is mostly facilitated at the retail level. Significant number of customers must be able to see prices before they make consumption decisions and customers must have reasonable means to adjust consumption in response to those prices. Attaining these goals requires both appropriate retail policies and technological innovation. But let me be clear: FERC is focused energetically on making a robust demand response a reality.

So, to summarize, my message to you this morning is fourfold. First, we get it now. FERC is committed to policy choices that respect the huge value of demand resources. Second, the standard market design contains several key features that reflect this commitment. Third, we can't make it happen alone. Policy evolution must occur at the state level. FERC can pave the way for demand markets, but only state regulators can implement retail policies that facilitate demand responsiveness. And fourth, I appreciate your creativity and perseverance in educating policy makers on this issue. Stay after us – hold our feet to the fire to make sure that our policy choices actually carry through with our stated commitment to full participation by demand resources in well functioning wholesale markets.